CLAIMS

What is being claimed is:

1. A device comprising:

a semiconductor light emitting device; and

a mount comprising a body and a quantity of material attached to the body, the quantity of material forming a wall;

wherein:

the wall is reflective to light emitted from the semiconductor light emitting device; and

the semiconductor light emitting device is attached to the mount.

2. The device of claim 1 wherein the quantity of material is reflective.

3. The device of claim 1 further comprising a reflective layer formed on the wall.

4. The device of claim 3 wherein the reflective layer is reflective of light emitted by the semiconductor light emitting device.

5. The device of claim 3 wherein the reflective layer comprises a metal selected from the group of Al, Ag, Au, Pt, Pd, In, Ni, and Cr.

6. The device of claim 3 wherein the reflective layer is a metal.

7. The device of claim 6 further comprising a dielectric layer overlying the metal reflective layer.

8. The device of claim 3 wherein the reflective layer comprises a dielectric stack.

9. The device of claim 1 wherein the mount comprises a material selected from the group of silicon, ceramic, polymer, FR4, oxides of aluminum, and nitrides of aluminum.

10. The device of claim 1 wherein the quantity of material comprises one of BCB, PMMA, photoresist, polyamides, glass, spin-on-glass, Al, Ag, Au, Pt, Pd, In, Ni, and Cr.

11. The device of claim 1 wherein the wall has a height between about a height of the semiconductor light emitting device plus 25% and about ten times the height of the semiconductor light emitting device.

12. The device of claim 1 further comprising a plurality of leads electrically connected to the semiconductor light emitting device and a cover overlying the semiconductor light emitting device.

13. The device of claim 1 wherein the wall is angled.

14. The device of claim 1 wherein the wall is parabolic.

15. The device of claim 1 wherein the wall is shaped and positioned to reflect light emitted by the semiconductor light emitting device.

16. The device of claim 1 wherein the quantity of material is a quantity of first material, the device further comprising a quantity of second material disposed between the device and the wall.

17. The device of claim 16 wherein quantity of second material has a higher index of refraction than the quantity of first material.

18. The device of claim 16 wherein the quantity of second material comprises air.

19. The device of claim 16 wherein the quantity of first material encapsulates a region of air.

20. The device of claim 16 wherein the quantity of second material comprises one of epoxy and silicone.

21. The device of claim 16 wherein the quantity of second material has an index of refraction between about 1.4 and about 1.7.

22. The device of claim 1 further comprising an adhesive disposed between the quantity of material and the body.

23. A method of forming a device, the method comprising:

forming a mount comprising a body;

depositing a quantity of material on the body to form a wall; and

attaching a semiconductor light emitting device to the mount.

24. The method of claim 23 wherein depositing a quantity of material to form a wall comprises:

depositing a film of material on the mount; and

etching away a portion of the film to form an angled wall.

25. The method of claim 24 wherein the film has a thickness between about a height of the semiconductor light emitting device plus 25% and about ten times the height of the semiconductor light emitting device.

26. The method of claim 23 further comprising forming a reflective layer on the wall.

27. The method of claim 23 wherein mounting a semiconductor light emitting device comprises mounting the device such that at least a portion of light emitted by the semiconductor light emitting device is incident on the wall.

28. The method of claim 23 wherein depositing a quantity of material to form a wall comprises:

forming a wall from a quantity of material; and

after said forming a wall from a quantity of material, attaching the wall to the body with an adhesive.